



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/823,377

04/12/2004

Robert D. Groneberg

03-086-A

4839

20306

7590

02/02/2007

MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP

300 S. WACKER DRIVE

32ND FLOOR

CHICAGO, IL 60606

EXAMINER

SEAMAN, D MARGARET M

ART UNIT

PAPER NUMBER

1625

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
--	-----------	---------------

31 DAYS

02/02/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/823,377	GRONEBERG ET AL.	
	Examiner	Art Unit	
	D. Margaret Seaman	1625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-62 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-62 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

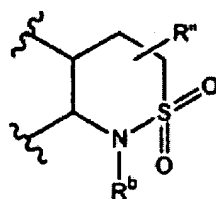
This application was filed 4/12/2004 and claims benefit of Provisional application 60/461,888 (4/10/2003). Claim 60 will not be included in the following restriction requirement due to the claims being drawn to "Use of" which is non-statutory subject matter. Claims 1-59 and 61-62 are before the Examiner and are subject to the following restriction requirement.

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-13, 48 and 61 (in part), drawn to compounds of formula I' wherein R is a carbocyclic ring, classified in various classes and subclasses, depending upon an election of a single disclosed species for further restriction purposes.
 - II. Claims 1-13, 48 and 61 (in part), drawn to compounds of formula I' wherein R is chroman, classified in class 549, subclass various, depending upon an election of a single disclosed species.
 - III. Claims 1-13, 48 and 61 (in part), drawn to compounds of formula I' wherein R is benzothiazinyl, classified in class 548, subclass various, depending upon an election of a single disclosed species.

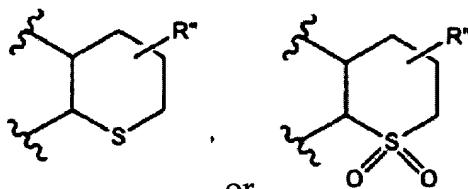
Art Unit: 1625

- IV. Claims 1-13, 48 and 61 (in part), drawn to compounds of formula I' wherein R is quinoline or naphthyridine, classified in class 546, subclass various, depending upon an election of a single disclosed species.
- V. Claims 1-13, 48 and 61 (in part), drawn to compounds of formula I' wherein R is a heterocycle other than encompassed by the above groups, classified in class 540-549, subclass various, depending upon an election of a single disclosed species for further restriction purposes.
- VI. Claims 14-27 and 62 (in part), drawn to compounds of formula II' wherein



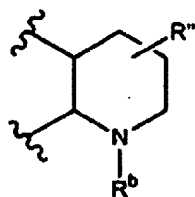
the C-ring is , classified in class 544, subclass various depending upon an election of a single disclosed species.

- VII. Claims 14-27 and 62 (in part), drawn to compounds of formula II' wherein



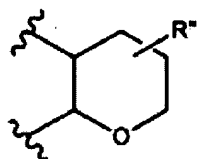
the C-ring is or , classified in class 549, subclass various depending upon an election of a single disclosed species.

VIII. Claims 14-27 and 62 (in part), drawn to compounds of formula II' wherein



the C-ring is , classified in class 544, subclass various depending upon an election of a single disclosed species.

IX. Claims 14-27 and 62 (in part), drawn to compounds of formula II' wherein



the C-ring is , classified in class 549, subclass various depending upon an election of a single disclosed species.

X. Claims 14-27 and 62 (in part), drawn to compounds of formula II' wherein the C-ring is heterocyclic moiety other than above groups VI-IX , classified in class 540-549, subclass various depending upon an election of a single disclosed species.

XI. Claims 14-27 and 62 (in part), drawn to compounds of formula II' wherein the C-ring is a carbocyclic moiety, classified in various classes and subclasses depending upon an election of a single discloses species for possible further restriction purposes.

XII. Claims 28-32, drawn to compounds of formula III', classified in class 549, subclass various, depending upon an election of a single disclosed species.

- XIII. Claims 33-37 (in part), drawn to compounds of formula IV' wherein R2 is naphthyl or phenyl, classified in various classes and subclasses, depending upon an election of a single disclosed species.
- XIV. Claims 33-37 (in part), drawn to compounds of formula IV' wherein R2 is pyridine, quinoline or isoquinoline, classified in various class 546, subclass various, depending upon an election of a single disclosed species.
- XV. Claims 38-42 (in part), drawn to compounds of formula V' wherein R2 is naphthyl or phenyl, classified in various classes and subclasses, depending upon an election of a single disclosed species.
- XVI. Claims 38-42 (in part), drawn to compounds of formula V' wherein R2 is pyridine, quinoline or isoquinoline, classified in various class 546, subclass various, depending upon an election of a single disclosed species.
- XVII. Claims 43-47, drawn to compounds of formula VI', classified in class 544, subclass various depending upon an election of a single disclosed species.
- XVIII. Claim 49, drawn to a compound, classified in class 562, subclass 1+.
- XIX. Claims 50-59 and 62 (in part), drawn to methods of treatment and pharmaceutical compositions using a compound of formula I' wherein R is a carbocyclic ring, classified in various classes and subclasses, depending upon an election of a single disclosed species for further restriction purposes.

- XX. Claims 50-59 and 62 (in part), drawn to methods of treatment and pharmaceutical compositions using a compound of formula I' wherein R is chroman, classified in class 549, subclass various, depending upon an election of a single disclosed species.
- XXI. Claims 50-59 and 62 (in part), drawn to methods of treatment and pharmaceutical compositions using a compound of formula I' wherein R is benzothiazinyl, classified in class 548, subclass various, depending upon an election of a single disclosed species.
- XXII. Claims 50-59 and 62 (in part), drawn to methods of treatment and pharmaceutical compositions using a compound of formula I' wherein R is quinoline or naphthyridine, classified in class 546, subclass various, depending upon an election of a single disclosed species.
- XXIII. Claims 50-59 and 62 (in part), drawn to methods of treatment and pharmaceutical compositions using a compound of formula I' wherein R is a heterocycle other than encompassed by the above groups, classified in class 540-549, subclass various, depending upon an election of a single disclosed species for further restriction purposes.

2. The inventions are distinct, each from the other because of the following reasons:

Inventions I-XVIII and XIX-XXIII are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown:

(1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product. See MPEP § 806.05(h). In the instant case the treatments can be made with materially different compounds.

Inventions I and II-XVIII are directed to related compounds. The related inventions are distinct if the (1) the inventions as claimed are either not capable of use together or can have a materially different design, mode of operation, function, or effect; (2) the inventions do not overlap in scope, i.e., are mutually exclusive; and (3) the inventions as claimed are not obvious variants. See MPEP § 806.05(j). In the instant case, the inventions as claimed are not obvious variants. Furthermore, the inventions as claimed do not encompass overlapping subject matter and there is nothing of record to show them to be obvious variants.

Inventions XIX and XX-XXIII are directed to related methods of use. The related inventions are distinct if the (1) the inventions as claimed are either not capable of use together or can have a materially different design, mode of operation, function, or effect; (2) the inventions do not overlap in scope, i.e., are mutually exclusive; and (3) the inventions as claimed are not obvious variants. See MPEP § 806.05(j). In the instant case, the inventions as claimed are not obvious variants. Furthermore, the inventions as

claimed do not encompass overlapping subject matter and there is nothing of record to show them to be obvious variants.

3. Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions have acquired a separate status in the art due to their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

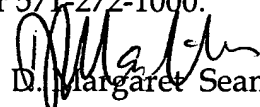
Art Unit: 1625

4. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to D. Margaret Seaman whose telephone number is 571-272-0694. The examiner can normally be reached on 730am-4pm, Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas McKenzie can be reached on 571-272-0670. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


D. Margaret Seaman
Primary Examiner
Art Unit 1625

dms